



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/803,712

03/18/2004

Yee-Chia Yeo

TSM03-0760

7832

43859 7590 01/26/2010
SLATER & MATSIL, L.L.P.
17950 PRESTON ROAD, SUITE 1000
DALLAS, TX 75252

EXAMINER

RAYMOND, BRITTANY L

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

01/26/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Allowability	Application No.	Applicant(s)	
	10/803,712	YEO ET AL.	
	Examiner	Art Unit	
	BRITTANY RAYMOND	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to pre-brief conference request filed 10/29/2009.
2. ☒ The allowed claim(s) is/are 38,40-49,52-55,58-60,62-68,70,71 and 73-75.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Courtney on 11/24/2009.

The application has been amended as follows:

Claim 40, line 2: change "between 2 and about 7" to read – between 2 and less than 7 --

Claim 41, line 2: change "between 4 and about 7" to read – between 4 and less than 7 --

Claim 42, line 2: change "between 5 and about 7" to read – between 5 and less than 7 –

Claim 43, line 2: change "between 6 and about 7" to read – between 6 and less than 7 –

Claim 44, line 2: change "a concentration in the range of 10^{-7} to 10^{-2} mole/L" to read – a concentration in the range of greater than 10^{-7} to 10^{-2} mole/L --

Claim 45, line 2: change "a concentration in the range of 10^{-7} to 10^{-4} mole/L" to read – a concentration in the range of greater than 10^{-7} to 10^{-4} mole/L --

Claim 46, line 2: change "a concentration in the range of 10^{-7} to 10^{-5} mole/L" to read – a concentration in the range of greater than 10^{-7} to 10^{-5} mole/L --

Art Unit: 1795

Claim 47, line 2: change “a concentration in the range of 10^{-7} to 10^{-6} mole/L” to read – a concentration in the range of greater than 10^{-7} to 10^{-6} mole/L –

Claim 64, line 2: change “in the range of 2 to about 7” to read – in the range of 2 to less than 7 --

Claim 65, line 2: change “in the range of 5 to about 7” to read – in the range of 5 to less than 7 –

Claim 66, line 2: change “in the range of 6 to about 7” to read – in the range of 6 to less than 7 –

Cancel withdrawn claims 1-37, directed to a system.

2. The following is an examiner’s statement of reasons for allowance: The prior art references do not disclose or reasonably suggest performing an immersion lithography process on a substrate where the photoresist is soluble in the immersion fluid and the immersion fluid comprises water and a fluorine containing compound, which has a pH of less than 7. The prior art reference, Fukuda, only teaches the use of an immersion fluid comprising water. The prior art reference, Kunz, teaches the addition of a fluoride containing compound into the immersion fluid, but the immersion fluid is not water. Kunz also teaches away from the photoresist being soluble in the immersion fluid.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 1795

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRITTANY RAYMOND whose telephone number is (571)272-6545. The examiner can normally be reached on Monday through Friday, 9:00 a.m. - 5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kathleen Duda/
Primary Examiner, Art Unit 1795

blr